

inputs

force multiplication

force exerted by effort

force acting on lever

conservation of energy

force acting on lever

force exerted by load

large distance moved at steady speed

small distance moved at steady speed

distance multiplication

force exerted by effort

force acting on lever

conservation of energy

force acting on lever

force exerted by load

small distance moved at steady speed

large distance moved at steady speed

machines make connections

for levers, stiff material links input and output

for pulleys, stiff rope links input and output

for hydraulic machines, nearly incompressible fluid links input and output

outputs